

ANIMAL CONTROL PLAN
for
ST. MARKS NATIONAL WILDLIFE REFUGE

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MAY 15 1990

ST. VINCENT NATIONAL
WILDLIFE REFUGE

John A. White
(Submitted by)

1/6/87
(Date)

(Reviewed by)

(Date)

Bill A. Gabriel
(Approved by)

1/20/87
(Date)

ANIMAL CONTROL PLAN

ST. MARKS NATIONAL WILDLIFE REFUGE

I. INTRODUCTION

This plan is developed as the general policy to govern future control efforts of feral hog, beaver, and raccoon populations on the St. Marks National Wildlife Refuge. It does not propose immediate implementation of all recommendations, but establishes guidelines for future hog, beaver, and raccoon control measures as biological and administrative conditions dictate and allow.

The St. Marks National Wildlife Refuge came into existence in 1931, with the primary objective being migratory waterfowl management. Changing national priorities and subsequent congressional actions over the past 48 years have greatly enlarged the scope and depth of the Refuge commitment to also include management considerations for endangered species, native species, and public recreation.

One of the oldest units with the National Wildlife Refuge System, St. Marks encompasses 64,499 acres of land, marsh, and water within its boundaries. It is divided into 30,242 acres of marsh and water adjacent to and within the woodlands, and 34,257 acres of wooded and upland habitat. An additional 31,500 acres of open water of the adjacent Apalachee Bay is attached to and protected under Executive Closing Order. Marsh and water habitat outside of and adjacent to these woodlands includes 1,994 acres of managed impoundments and ponds and 24,569 acres of tidal marsh. Vegetative dominance within the managed impoundments includes cattail, white water lily, bladderwort, chara, and widgeongrass. Tidal marshes are needlerush dominated.

For administrative purposes the Refuge is divided into three distinct management units: the St. Marks Unit, the Wakulla Unit, and the Panaces Unit. These three units occupy some 40 miles of coastline stretching from the Aucilla River on the eastern boundary to the Ochlockonee River on the western boundary.

The centerpiece of everything that occurs at St. Marks NWR is the total wildlife community. This includes some 459 vertebrate species. No one habitat type or condition favors them all, and the challenge of wildlife management is to set up in time and space a diversity of conditions which provides life requirements for them all. This challenge is further heightened by the fact that a dynamic system like a forest is never at rest, is always evolving and changing, and this makes maintenance of these conditions as important as establishment of these conditions.

The 34,257 acres of wooded upland habitat consists of four major woodland habitat types: Longleaf pine-scrub oak, pine flatwoods, hardwood hammocks, and swamps. Seventeen distinct forest cover types are represented within these habitat types. Some 5,361 acres of fresh water ponds, lakes, and marshes, as well as 1,159 acres of seeded fields and roads are widely dispersed throughout these upland habitats.

This wide variety of habitats (salt marsh, tidal streams, freshwater marsh, managed impoundments, ponds and lakes, and varied upland types), the semi-tropical climate, and the close proximity of Apalachee Bay makes for one of the most diverse units within the entire Refuge system.

II. STATE AND FEDERAL CONSULTATION AND ASSISTANCE

Contacts were made with Dick Thompson and Colonel Phelps on beaver control. Dick Thompson is Florida Director of Animal Damage Control with U.S.D.A. Colonel Phelps is with Florida Game and Fresh Water Fish Commission. Their suggestions paralleled the alternatives offered in this proposal. A permit for use of steel traps was obtained from Florida Department of Natural Resources. Colonel Phelps was also consulted on the feral hog control plan and was in concurrence with the proposals. Gary Herndon and Charlie Chafin with Florida Game and Fresh Water Fish Commission provided consultation on beaver control.

III. CONTROL CONSIDERATIONS

A. Feral Hog.

U. S. Fish and Wildlife policy does not condone their presence or management forms which specifically promotes their presence or perpetration. As a competitor with and predator upon many true native wildlife species, feral hogs represent an undesirable presence in practically all Refuge habitats. The Refuge policy idealistically is eradication. Realistically, the policy will be that of control. Even if eradication upon Refuge lands were possible, adjacent private woodlands have the capability to quickly restock the Refuge. "Control" implies a predetermined level. Control in this case means a general absence of hog sightings and hog signs and a total absence of hog sightings and fresh hog signs in specific trouble spots.

Control measures to be considered include:

1. Removal through public hunts.
2. ~~Shooting~~ Shooting by Refuge personnel.
3. Trapping and destruction by Refuge personnel.
4. Trapping and sale by Refuge personnel.
5. Trapping and relocation by the Florida Game and Fresh Water Fish Commission.
6. Trapping and removal by permit.

Removal Through Public Hunts

By law, the feral hog is not generally considered a wildlife/game species. True wildlife/game species are property of the state. Feral hogs are property of the landowners upon whose land they roam, except in cases where marked hogs escape from land owners and trespass on adjacent lands. However, on State management areas, where hog claims have been purchased, feral hogs are considered desirable game species with appropriate size and number limits to insure their perpetuation. Though not considered a desirable presence by Service and Refuge policy, the feral hog is a desirable and highly sought game species and would attract considerable attention from Refuge hunters. With size and number limits removed from Refuge hogs, hunters would remove a considerable number of hogs. In addition to offering a measure of control, the removal of feral hogs provides recreational opportunities to the hunting public.

Accordingly, all big game hunts on the Refuge administered by the Refuge, will identify feral hogs as a target species. This will include both primitive and conventional weapons hunts. There will be no limit on the size or number of hogs that can be taken by a hunter during these hunts.

Shooting by Refuge Personnel

This method has ^{not} been the ~~one method most frequently~~ employed in past years. It has been mostly used in specific locations and situations as a trouble spot. Success has varied depending upon the degree of intensity with which applied. This method has not been routinely used for general control Refuge wide.

Properly used, this method can be incorporated into other routine Refuge operations as a general control or discreetly used in short term specific locations and situations. It is not, however, a method that can be flaunted in the face of Refuge visitors or the local community without running the risk of adverse public reaction. In the hands of sensitive and responsible employees, it can be incorporated into routine duties so as not to attract undue attention. Accordingly, this method will be used routinely in general situations and somewhat more intensively in specific locations and situations by selected Refuge and Service employees only. (In our case - loggerhead nests being destroyed by hog ^{or if needed} ~~the hogs~~.)

Trapping and Destruction by Refuge Employees.

The Refuge has the expertise to conduct a general trapping and destruction program which could effectively reduce the hog population. This would, however, require a considerable expenditure in manpower. At this time and in the foreseeable future, this station has many manpower priorities which rate higher than a general hog trapping program. In addition, a concentrated effort such as this would eventually become

2 with the ^{recent} addition of a permanent full-time biologist, the refuge has the manpower to conduct such a program.

public knowledge. It can be anticipated that a bad public relations problem could develop. In view of the fact that there are other methods that are less concentrated, less expensive in terms of manpower, and less objectional to the public, a broad general trapping program will not be initiated. However, discreet trapping and destruction by Refuge personnel in short term specific locations and instances has merit and will be retained and used as appropriate. *could be utilized to decrease significantly decrease hog numbers*

NO Trapping and Sale by Refuge Personnel

In terms of manpower priorities, this method would be roughly similar in rationale which eliminated general trapping and destruction by Refuge personnel. Add to that the expense to build and maintain holding facilities, transporting facilities, maintenance of the hogs while holding, and the expense of conducting sales and this method is quickly eliminated.

NO Trapping and Relocation by Florida Game and Fresh Water Fish Commission Under Permit.

Periodically the Commission moves in and out of a hog trapping and relocation program. As of 1980, the relocation of hogs to management areas has been de-emphasized. However, this method will be retained as an option until such time as the Commission re-emphasizes this program. Some local opposition, particularly from adjacent land owners, and a certain amount of bad publicity can be expected from such a trapping effort. However, the favorable benefit to the Refuge plus the public benefit which would accrue to management area hunters should aid in the justification and defense of this effort.

NO Trapping and Removal by Permit

Trapping and removal by permit would appear to be a desirable and effective control measure. However, there are considerations which render this an unacceptable method and it is therefore rejected.

Feelings and petty jealousies concerning old hog claims still run deep in the local area. While the open range for the running of livestock is no longer law, it is still a fairly common practice to run livestock, particularly hogs, in private woodlands. The migration of hogs, both wild and claimed hogs, across Refuge boundaries is not uncommon. Petty conflict with numerous adjacent landowners over private Refuge trappers taking loose marked hogs or unmarked offspring of claimed hogs would make this an administrative headache. Benefits derived from this approach will be more than offset by bad publicity, congressional inquiries, and antagonized neighbors.

In addition, it is anticipated that trappers may come to look upon Refuge hog population as a perpetual livelihood, thus causing reluctance to cut into "their broodstock" by trapping down to densities desired by the Refuge.

Specific and short term trapping by permittees in trouble spots and situations will be retained as a valid option.

SUMMARY

It is recognized that the feral hog cannot realistically be eradicated on St. Marks NWR. Efforts at controlling the population will be just that, controlling. It is also recognized that none of the methods discussed will in isolation make for effective control. However, the constant application of combinations to fit the general and specific situations will produce an acceptable degree of success in a control effort.

N/A B. Beaver

Problems associated with beavers and their activities began to occur in recent years on St. Marks. The beaver population is showing a slow increase. Habitat and topography may be conducive for beaver populations to accelerate. Properly placed dams are capable of flooding large areas of habitat on an annual basis. The ecological impact of the beaver is not all bad or all good. Beaver ponds provide excellent rearing habitat for wood ducks and other wildlife species. On the other hand beaver can damage hardwoods, levees, roads and water control structures. Limited control methods are needed to control beavers where conflicts exist. A recent conflict occurred where beaver backed water onto private lands adjoining the Refuge.

Control methods to be considered include:

1. Chemosterilants
2. Poisons
3. Shooting by Refuge personnel
4. Trapping by licensed trappers
5. Trapping by Refuge personnel

Chemosterilants

Studies in Mississippi have shown that fertility has been reduced in beaver through the use of chemosterilants in captivity. Effective methods of treating beaver in the wild have not been developed to make this approach practical.

Poisons

Studies have revealed that two stomach poisons in sweetgum balsom painted on sweetgum limbs are readily taken and will effectively kill beaver. However, neither of these chemicals is EPA approved at the present time. It is not likely that this will be a viable alternative.

Shooting by Refuge Personnel

This method has proven to be an effective method using .22 caliber rifles using hollow points shells and 12 guage shotguns using buckshot. Dawn or dusk is generally the best time to employ this method.

Trapping by Licensed Trappers

The low price paid for beaver pelts is insufficient to interest local trappers to trap only beaver at selected areas of the Refuge. Pelt prices are currently around \$5.00.

Trapping by Refuge Personnel

Trapping will be used in problem areas. Number 330 Victor Conibear or equivalent traps will be used in runs and around scent mounds. These traps have proven to be very effective and relatively humane. Traps will be used in runs near beaver lodges and by using water sets near dry land scent mounds. Traps will be checked daily.

Summary

A combination of shooting and trapping of beaver in problem areas is recommended. Consultation with Colonel Phelps and Dick Thompson have concurred with this approach. Permits have been obtained from Florida Department of Natural Resources for use of Conibear traps. The objective of this proposal is to control beaver in problem areas but not to eliminate them refuge wide.

All beaver management activities will be in accordance with State laws and regulations.

C. Raccoon

Raccoon problems on St. Marks are not common but under certain situations they can cause conflicts. The particular situation where conflicts occur is during duck trapping season. During this period when ducks are being concentrated by bait into traps, raccoons can get into traps and kill numerous waterfowl. Often the raccoons will kill more ducks than are necessary for a meal. The cost of trapping and banding waterfowl is high and a few problem raccoons can reduce banding success and raise the cost of trapping. The objective of raccoon control on St. Marks will be during the period of pre-baiting through the end of banding season or when the quota is reached. Control will be exercised in the vicinity of the trapping sites. Efforts will be exerted on those raccoons feeding in the vicinity of waterfowl traps. Trap sites will vary from year to year depending on water levels and areas utilized by waterfowl.

~~(It would be better to refrain from raccoon control other than legal hunting and trapping on island.)~~

In our case coons are a problem w/ loggerheads. I think we need to concentrate on control on and near the beach. To shoot coons on the north side is not necessary.

We could start shooting and trapping about a month before nesting season until nesting is over for loggerheads and shorebirds.

Shooting could take place discretely on the beach and traps can be placed near the beach (tree line) and out of sight. Live trapping would be preferred

1) could have fresh coon to feed wolves while in pen 2) could use traps to obtain population index 3) during summer wouldn't have to worry about catching wolf pup in trap.

would do this after nesting season (fall) place traps ^{all} over the island - mark coons

Control measures to be considered include:

1. Trapping by Refuge employees
2. Shooting by Refuge employees

Trapping by Refuge Personnel

This method is most commonly used by trappers in taking raccoon. Generally, number 1½ or number 2 leghold traps placed in a ground set with scent is used to catch coons. Traps set in this manner should catch the raccoons causing depredation on trap sites. Raccoons caught would be shot to eliminate future problems. Live traps would be too costly and too bulky to be efficient in controlling problem raccoons. The total number of raccoons caught in a year would be low and would be specific to those causing depredation or possible depredation to waterfowl coming to bait sites. Trapping would need to be done annually during the trapping and banding season.

Shooting by Refuge Personnel

This method can be used on a localized basis to back up the trapping efforts. Use of .22 caliber rifles can be effective on an intermittent basis to remove raccoons from the bait sites. This technique can be used both day and night but should be more effective at night using a light. Coons are more actively feeding at night and success in removal could be improved during active feeding periods. This technique along with trapping should contain the depredation problem around trap sites.

Summary

A combination of trapping and shooting of raccoons in problem areas is recommended. The objective of this proposal is to control raccoons in areas around duck trapping sites where they are causing depredation to waterfowl.

All raccoon management activities will be in accordance with State laws and regulations.

I think some occasional

night time beach

protection would be

useful - look for

nest ~~to shoot~~ ~~on beach~~

biologist